

12. Where the rooms are large, as in case of parlors and sitting rooms, and require two or more flues for the introduction and exit of air, it is important to distribute them so that all parts of the rooms shall be supplied uniformly.

13. Heating is combined with ventilation. The air is warmed to the degree required by being compelled to pass over cast iron radiators, through which steam is circulated, on its way from the fan to the occupied parts of the building. These radiators are placed in the main air duct or plenum, and are in separate blocks directly underneath the flues leading from this duct to the occupied parts of the building. There is a box of radiators for each set of three flues, one flue leading to each story. Each block has an independent connection with the main steam pipe, so that each block can be used separately. Each block is cased in on the sides leaving the bottom open for the free passage of air over the radiators. By this arrangement the air is warmed at the nearest point of its delivery for use, and the heat is not wasted by absorption into the walls of a large general air chamber, and the temperature of the air sent into any special part of the building can be regulated as may be desired, simply by introducing more or less steam into the individual blocks.

14. These radiators are so constructed and connected as to make what is called a "steam coil," and the blocks are so arranged and connected that steam can be turned upon one-third, two-thirds, or the whole, as the atmospheric temperature may require. Of course, there is no impediment to the passage of the air through these blocks for summer ventilation when heat is not needed, as the space between them is sufficient for the passage of the largest volume of air required.

15. This large body of air entering and distributed in the manner described produces no appreciable current. It is not found necessary to raise the temperature of the air introduced higher than 100 degrees at the point of entrance